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(21) International Application Number: <b>PCT/US97/05690</b> (22) International Filing Date: <b>24 March 1997 (24.03.97)</b> (30) Priority Data: 621,088                      22 March 1996 (22.03.96)                      US (71) Applicant: <b>ADVANCED MATERIALS TECHNOLOGY INC.</b> [US/US]; 7 Commerce Drive, Danbury, CT 06810 (US). (72) Inventors: <b>VAN BUSKIRK, Peter, C.</b> ; 18 Poverty Hollow Road, Newton, CT 06470 (US). <b>FAIR, James, A.</b> ; 2417 Laura Lane, Mountain View, CA 94043 (US). <b>KOTECKI,</b> <b>David, E.</b> ; 37 Sylvan Lake Road, Hopewell Junction, NY 12533 (US). (74) Agent: <b>HULTQUIST, Steven, J.</b> ; Intellectual Prop- erty/Technology Law, P.O. Box 14329, Research Triangle Park, NC 27709 (US).	(81) Designated States: JP, KR, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	

(54) Title: INTERIORLY PARTITIONED VAPOR INJECTOR FOR DELIVERY OF SOURCE REAGENT VAPOR MIXTURES FOR CHEMICAL VAPOR DEPOSITION

## (57) Abstract

A shower dispenser (2) for mixing plural vapor streams, comprising: a housing (10) including front and rear walls (12, 14) and a side wall (16) therebetween, defining an interior volume (15); the front wall having a multiplicity of vapor mixture discharge openings (20) therein, for discharging mixed vapor from the housing; flow passages (24) joined to the housing for introducing fluids into the housing; and at least one baffle plate (18) mounted in the interior volume of the housing, the baffle plate and side wall forming an annular flow passage (21) therebetween and the baffle plate having at least one of the respective fluids directed thereagainst upon introduction to the interior volume of the housing, for distribution thereof in the interior volume of the housing. The baffled showerhead dispenser is usefully employed to form thin films by CVD of highly uniform composition and thickness.

